What is claimed is:

     1. An image coding device for coding a motion image signal, and outputting the coded data as a bit stream, said image coding device comprising:

5   an input image controller that executes a predetermined processing to an input motion image signal for reducing the amount of coded data when coding the motion image signal by a coding method in which it is prescribed that the frame rate of a motion image signal is set to a constant level to be output at its decoding time, and

10   outputs the processed motion image signal, together with the process information indicating the detail of said processing, and

     an image coder for coding the motion image signal processed at said input image controller into a data in conformity with said coding method on the basis of said process information.

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     2. The image coding device according to claim 1, wherein said coding method is the MPEG 2.

     3. The image coding device according to claim 1, wherein said

20   input image controller excludes either one field of each of the frames at a predetermined rate when the input motion image signal is of the interlace mode, and outputs the processed motion image signal together with the process information showing the thus excluded fields, and

25   said image coder detects the exclusion of fields on the basis of said process information, and adds an instruction to output another field instead of the excluded field at the time of decoding as overhead information before coding said processed motion image signal.

4. The image coding device according to claim 1, wherein said input image controller excludes frames at a predetermined rate when the input motion image signal is of the progressive mode, and outputs the processed motion image signal together with the process

5 information showing the thus excluded frames, and

said image coder detects the exclusion of frames on the basis of said process information, and adds an instruction to output another frame field instead of the excluded frame at the time of decoding as overhead information before coding said processed motion image

10 signal.

5. The image coding device according to claim 1, wherein said input image controller excludes either one field of each of the frames at a predetermined rate when the input motion image signal is of the

15 interlace method, and outputs the processed motion image signal, together with the process information showing the thus excluded fields, and

said image coder detects the exclusion of fields on the basis of said process information, performs a predictive coding with

20 respect to the thus excluded fields on the basis of the other fields, and generates a coded data corresponding to said excluded fields.

6. The image coding device according to claim 5, wherein said image coder executes a predictive coding, considering all the motion

25 vectors in the horizontal and vertical directions to be "0".

7. The image coding device according to claim 5, wherein said image coder executes a predictive coding, considering all the motion vectors in the horizontal direction to be "0", and all the motion

vectors in the vertical direction to be either "+0.5" or "-0.5".

8. The image coding device according to claim 5, wherein either said image coder or said input image controller observes a motion vector from two fields; namely preceding and following fields of each of said excluded fields, and

said image coder interpolates said determined motion vector in accordance with each of the intervals between each of said excluded fields and said two fields, and executes a predictive coding about said excluded fields.

9. The image coding device according to claim 1, wherein said image coder changes the size of a motion image signal, outputs the motion image signal after processing, and also outputs process information indicating that the image size has been changed, and

said image coder detects frames whose image sizes have been changed within the whole processed motion image signal on the basis of the process information, and performs an intra-coding operation with respect to the first coded frame.

10. The image coding device according to claim 9, wherein said image coder changes the size of a motion image signal at the top of every predetermined image units, and

said image coder performs an intra-coding operation with respect to the frame whose image size has been changed.

11. The image coding device according to claim 10, wherein said input image controller changes the size of a frame immediately after a GOP header.

12. The image coding device according to claim 1, wherein said input image controller suppresses high-frequency components of a motion image signal.

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13. The image coding device according to claim 1, wherein said input image controller executes a predetermined processing in accordance with the picture mode of each frame.

10   14. The image coding device according to claim 1, wherein said input image controller determines the amount of coding at the image coder on the basis of at least either one of the discrete state of pixel values in each frame, the difference of pixels between frames and a motion vector, and executes a predetermined processing in 15 accordance with the thus determined amount of coding.

15. The image coding device according to claim 1, wherein said input image controller determines the amount of coding at the image coder on the basis of the mode of pictured scene, and executes a 20 predetermined processing in accordance with the thus determined mode of pictured scene.

16. A method of image coding for coding a motion image signal and outputting the thus coded data as a bit stream, said method 25 comprising the steps of:

executing a predetermined processing to an input motion image signal for reducing the amount of coded data when coding the motion image signal by a coding method in which it is prescribed that the frame rate of a motion image signal is set to a constant level to

be output at its decoding time, and outputting the processed motion image signal, together with the process information indicating the detail of said processing, and

   coding the motion image signal processed at said input image
5 controller into a data in conformity with said coding method on the basis of said process information.

   17. An image coding device for coding a motion image signal and outputting the thus coded data as a bit stream, said device
10 comprising:

   an input image controller which, in the case where the motion image signal is of the interlace mode, equalizes two fields of each frame at a predetermined rate, and outputs the thus processed motion image signal, and

15 an image coder that codes the motion image signal processed at said input image controller by a decoding method which is in conformity with a method that is designed for outputting a motion image signal at a constant frame rate.